UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/651,539	08/29/2000	Thomas G. Adams	19927-000510US	9913

			EXAMINER
20350	7590	07/13/2005	TRAN, HAI V

TOWNSEND AND TOWNSEND AND CREW, LLP
TWO EMBARCADERO CENTER
EIGHTH FLOOR
SAN FRANCISCO, CA 94111-3834

ART UNIT	PAPER NUMBER
2611	

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/651,539	ADAMS ET AL.
	Examiner	Art Unit	
	Hai Tran	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _19 April 2005_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-35_ is/are pending in the application.

    4a) Of the above claim(s) _1-16,20,22,23 and 28-30_ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _17,19,21,24-27 and 31_ is/are rejected.

7)☒ Claim(s) _18 and 32-35_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 04/19/2005 have been fully considered but they are not persuasive.

Applicant argues, "As applicant has previously argued, one skilled in the art with the knowledge of Ryan would not be motivated to combine the teaching of Ryan and Lang et al. because Lang et al. relates to the processing of a single data stream that has been parsed into multiple PES packets. Lang et al. Is not in the same field of endeavor, even though it relates generally to computer memories."

In response, In response to applicant's argument that Lang et al. is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Lang et al., at least relates to computer memories, in which Lang et al. teaches how the function of optimizing data transfer between host memory and its associated buffers is performed, see Lang et al. (Col. 3, lines 37-45). Thus, the combination of Ryan in view of Lang et al. is proper.

As to applicant argument to newly amended limitations in independent claims 17 and 27, the Examiner respectfully disagrees with applicant because Ryan teaches that allocation for DMA channels is provided in local memory (flow control unit 318; Fig. 3)

and associating each DMA channel with a specific location in the memory of a host

computer (Col. 6, lines 23-26).

What Ryan does not teach is "providing at least one data descriptor comprising a

frame descriptor and at least one data descriptor comprising a channel context

descriptor and the channel context descriptor associates a region in the host memory

where data is to be stored."

Lang discloses at least one data descriptor comprising (Fig. 15) RPDs (frame

descriptor) (Col. 17, lines 60-Col. 18, lines 25) and at least one data descriptor

comprising (Fig. 24) TD (channel context descriptor) associates a region in the host

memory where data is to be stored (Col. 22, lines 48-65+).

As such the Examiner maintains the rejection.

Allowable Subject Matter

Claims 18, and 32-35 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 17, 19, 21, 27, and 31 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Ryan (US 5675654) in view of Lang et al. (US 6188699).

Claim 17, Ryan discloses a method of processing a transport stream

comprising:

The steps of parsing the transport stream to derive multiple elementary

streams including associated program identifiers (Col. 3, lines 52-54; Col. 4, lines

55-Col. 5, lines 62);

Using the associated program identifier to assign each stream a DMA

channel (Col. 5, lines 35-40; Col. 6, lines 23-56);

Associating each DMA channel with a specific location in the memory of a

host computer (Col. 6, lines 23-26); and

Performing DMA transfers of the multiple elementary streams to

corresponding locations in the memory of the host computer using the DMA

channels (Col. 5, lines 12-16; lines 55-Col. 8, lines 20).

Ryan further teaches that allocation for DMA channels, is provided in local

memory (flow control unit 318; Fig. 3) and associating each DMA channel with a

specific location in the memory of a host computer (Col. 6, lines 23-26).

Ryan does not clearly disclose "providing at least one data descriptor

comprising a frame descriptor and at least one data descriptor comprising a channel

context descriptor and the channel context descriptor associates a region in the host

memory where data is to be stored."

Lang discloses at least one data descriptor comprising (Fig. 15) RPDs (frame descriptor) (Col. 17, lines 60-Col. 18, lines 25) and at least one data descriptor comprising (Fig. 24) TD (channel context descriptor) associates a region in the host memory where data is to be stored (Col. 22, lines 48-65+).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ryan with Lang, so to provide a method of optimizing data transfer between host memory and its associated buffers, see Lang et al. (Col. 3, lines 37-45).

Claim 19, Ryan further discloses wherein the multiple elementary streams are transferred between a transport controller 320 and the memory of the host computer (Fig. 3; Col. 6, lines 57-58);

Claim 21, "wherein the DMA transfer is an automatic programmable transport interface operation wherein data is not buffered in a local memory prior to the transfer to the memory of the host computer" is inherently met by Ryan because the DMA transfer only occurs when the received data is buffered (Col. 6, lines 63-Col. 7, lines 40).

Claim 27, apparatus claim is analyzed with respect to method claim 17.

Claim 31, apparatus claim is analyzed with respect to method claim 21.

2. Claims 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan
   (US 5675654) in view of Lang et al. (US 6188699), and further in view of Fuji et al.
   (US 6477179).

   Claims 24-26, Ryan in view of Lang do not clearly disclose wherein the step
of transferring the multiple elementary streams to an end user system comprises
transferring the multiple elementary streams through an audio-visual interface;
however, Ryan discloses an end user system is an audio-visual system that receives
multiple elementary streams through a channel interface 112 (audio-visual
interface)(Fig. 1; Col. 1, lines 5-13).

   Fujii (US 6477179) discloses wherein the end user system comprises a
networked computer and the step of transferring the multiple elementary streams
(digital data stream) to an end user system through a network interface (LAN
Interface of the end-user system; Fig. 1-3 and 6; Col. 3, lines 55-Col. 4, lines 10 and
Col. 7, lines 19-60). Therefore, it would have been obvious to one of ordinary skill in
the art at the time the invention was made to modify Ryan and Lang by integrating a
network interface connected to a networked computer, as taught by Fujii (US
6477179), so the receiving device outputs digital data received through, for example,
a digital satellite broadcast network to a network computer (Col. 1, lines 6-10).

Conclusion

   Applicant's amendment necessitated the new ground(s) of rejection presented in
this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Hai Tran whose telephone number is (571) 272-7305.

The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Christopher C. Grant can be reached on (571) 272-7294. The fax phone

number for the organization where this application or proceeding is assigned is 703-

872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HT:ht
07/07/2005

**HAI TRAN
PRIMARY EXAMINER**